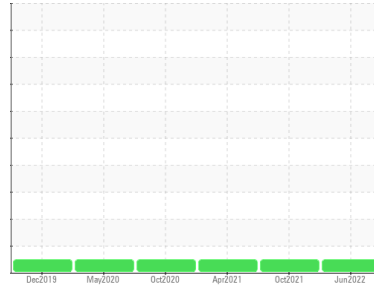




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
[192030]
 Machine Id
HCP G GOV
 Component
Pump
 Fluid
MOBIL DTE OIL HVY MEDIUM (91 LTR)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0445385	WC0445211	WC0328058
Sample Date	Client Info			27 Jun 2022	21 Oct 2021	29 Apr 2021
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method			NEG	NEG	NEG

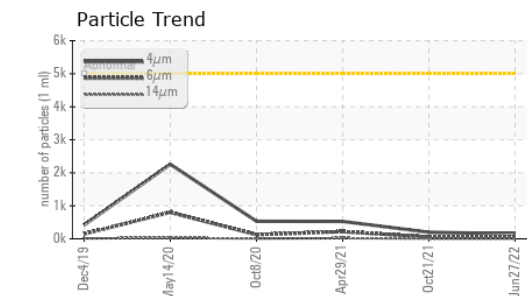
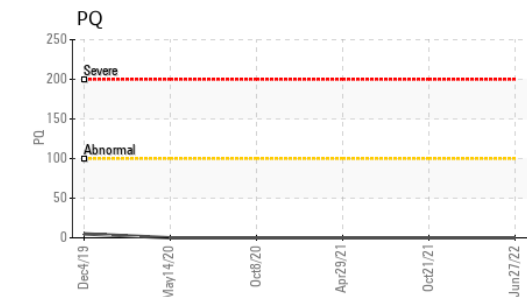
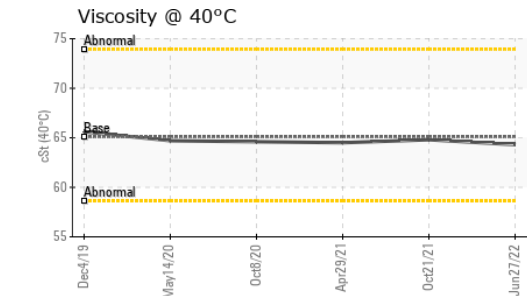
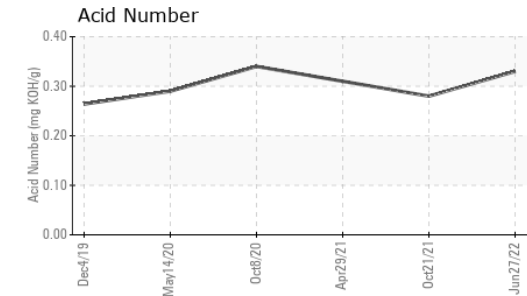
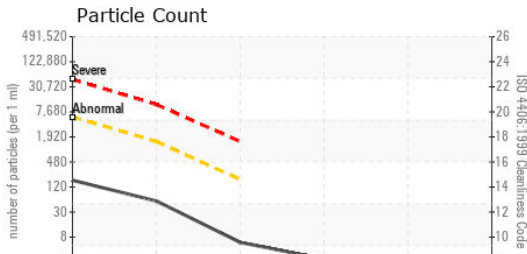
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m)	>90	6	6	6
Chromium	ppm	ASTM D5185(m)	>5	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	0	<1	<1
Titanium	ppm	ASTM D5185(m)	>3	0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>7	0	<1	<1
Lead	ppm	ASTM D5185(m)	>12	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>30	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>9	1	1	2
Antimony	ppm	ASTM D5185(m)		<1	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		2	2	2

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		0	<1	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		0	0	0
Calcium	ppm	ASTM D5185(m)		0	0	<1
Phosphorus	ppm	ASTM D5185(m)		44	40	40
Zinc	ppm	ASTM D5185(m)		132	131	128
Sulfur	ppm	ASTM D5185(m)		2109	2040	2045
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>60	0	<1	<1
Sodium	ppm	ASTM D5185(m)		0	0	0
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1



OIL ANALYSIS REPORT



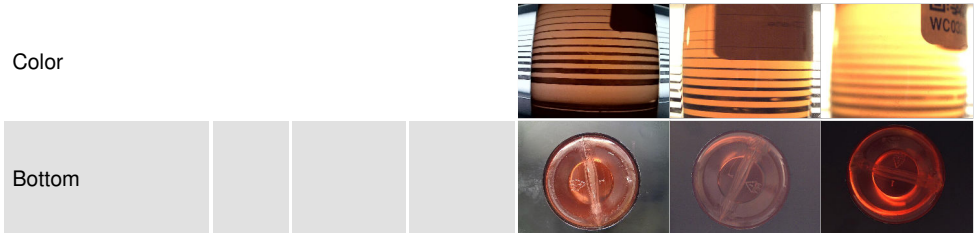
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	154	198	527
Particles >6µm	ASTM D7647	>1300	49	54	217
Particles >14µm	ASTM D7647	>160	5	5	19
Particles >21µm	ASTM D7647	>40	2	1	7
Particles >38µm	ASTM D7647	>10	0	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	14/13/10	15/13/10	16/15/11

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.33	0.28	0.31

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	NEG	NEG	NEG
Free Water	scalar	Visual*	NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	64.3	64.8	64.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

Bottom



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
 Sample No. : WC0445385
 Lab Number : **02517644**
 Unique Number : 5474624
 Test Package : IND 2 (Additional Tests: PRTCOUNT, TAN Man)

Received : 20 Oct 2022
 Diagnosed : 25 Oct 2022
 Diagnostician : Kevin Marson

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

NEWFOUNDLAND POWER INC.
 50 DUFFY PLACE, PO BOX 8910
 ST. JOHNS, NL
 CA A1B 3P6
 Contact: Paul Martin
 pmartin@newfoundlandpower.com
 T:
 F: (709)737-2926